

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-20 (Cancelled)

Claim 21 (Currently Amended): A method of assessing the extent of vascular injury associated with a coronary artery condition in a subject who has not had a myocardial infarction, comprising:

determining the level of pentraxin, PTX3, in a test blood, plasma, or serum sample from a subject compared to a control value of subject(s) having normal coronary artery condition control value; and

wherein

assessing a greater extent of vascular injury when an increased level of pentraxin in the blood, plasma, or serum of the subject is found compared to the control value is indicative of vascular injury;

wherein vascular injury is described by at least one of the following histological parameters (a) lipid core size, (b) thickness of fibrous cap, (c) strength of shear stress, and (d) extent of inflammatory infiltration.

Claim 22 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who does not have dementia in relation to a cerebrovascular disease.

Claim 23 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a healthy subject.

Claim 24 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who has hyperlipidemia.

Claim 25 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who has cerebral disease.

Claim 26 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who has hypertension.

Claim 27 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who has diabetes.

Claim 28 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who has obesity.

Claim 29 (Previously Presented): The method of claim 21, wherein said test sample is obtained from a subject who smokes.

Claim 30 (Previously Presented): The method of claim 21, wherein the sample is blood.

Claim 31 (Previously Presented): The method of claim 21, wherein the sample is plasma.

Claim 32 (Previously Presented): The method of claim 21, wherein the sample is serum.

Claim 33 (Previously Presented): The method of claim 21, wherein determining the level of pentraxin comprises detecting pentraxin with an antibody to pentraxin.

Claim 34 (Previously Presented): The method according to claim 21, wherein determining the level of pentraxin comprises detecting pentraxin with an antibody to pentraxin that is immobilized on a carrier.

Claim 35 (Previously Presented): The method according to claim 21, wherein determining the level of pentraxin comprises detecting pentraxin with an antibody to pentraxin that is immobilized on a chip.

Claim 36 (Previously Presented): The method according to claim 21, wherein determining the level of pentraxin comprises detecting pentraxin with an antibody to pentraxin that is immobilized on a carrier and a labeled antibody that binds to pentraxin.

Claim 37 (New): The method according to claim 21, wherein the control value is from a normal subject who does not have vascular injury.

Claim 38 (New): The method according to claim 21, wherein the control value is obtained from one or more subjects having normal coronary arteries.

Claim 39 (New): A method of assessing the extent of vascular injury in a subject at risk for heart disease, but who has not had a myocardial infarction, comprising:

determining the level of pentraxin, PTX3, in a test blood, plasma, or serum sample from a subject compared to a control value of subject(s) having normal coronary artery condition; and

assessing a greater extent of vascular injury when an increased level of pentraxin in the blood, plasma, or serum of the subject is found compared to the control value.

Claim 40 (New): The method of claim 39, wherein said subject is at risk of a coronary artery condition (CA), stable angina (AP), unstable angina (UAP), or myocardial infarction (AMI) compared to a normal subject having a normal coronary artery.

Claim 41 (New): A method for assessing progression of a coronary artery condition in a subject who has not had a myocardial infarction, comprising:

obtaining a blood, plasma or serum sample from said subject,
determining the level of pentraxin, PTX3, in the sample, and
assessing a progression from stable angina toward unstable angina, or from unstable angina toward myocardial infarction when the level of pentraxin, PTX3, is higher than the level of pentraxin, PTX3, determined in an otherwise similar sample previously obtained from the subject.

Claim 42 (New): The method of claim 41, wherein said otherwise similar sample previously obtained from the subject is obtained from a subject before administering a statin or aspirin, and said sample is obtained after the administration of statin or aspirin to the subject.